

4_4 DETERMINING EXISTING PAVEMENT CROSS SLOPES

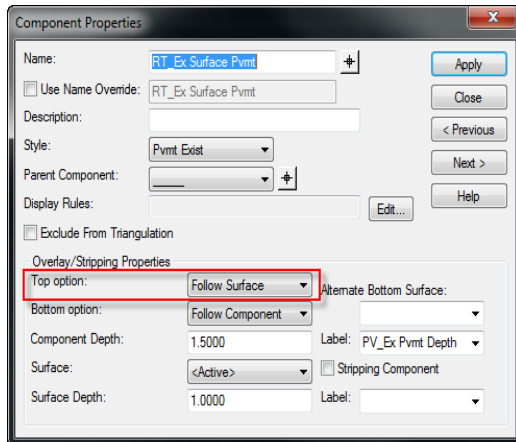
Question:

How does the template determine/match the existing pavement cross slope?

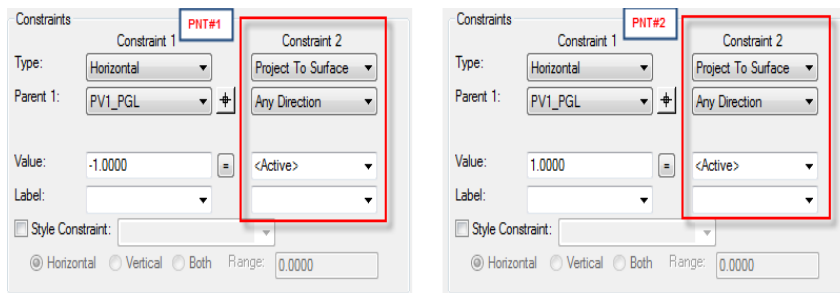
Answer:

There are three main methods used to determine the existing pavement cross slopes:

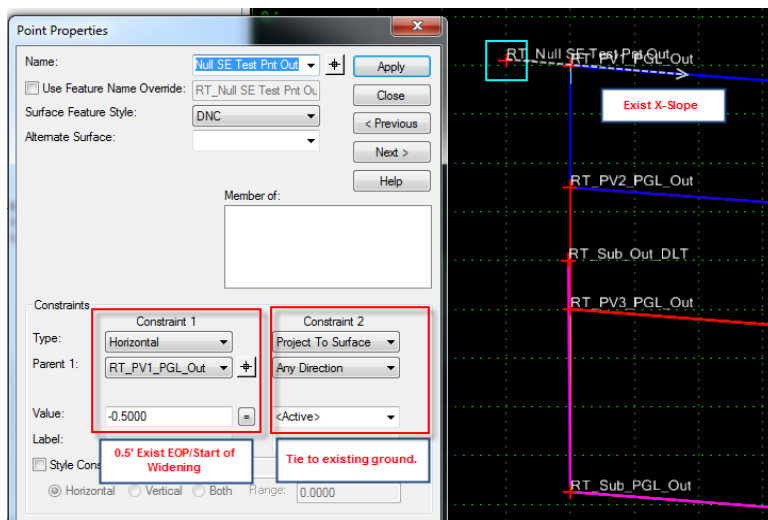
I. Overlay/Stripping Components – Set the **Top option** to “Follow Surface” (Active/Existing Terrain Model).



II. Pair of points with **Project to Surface** constraint set to “<Active>” (Active/Existing Terrain Model).



III. SE Test point 0.5' inside existing EOP.



Even though all three methods are used in our template library, Method III is common because the proposed pavement cross slope/superelevation rate is determined by the angle formed by two points (vector-offset = 0 constraint). Like traditional Criteria, empirically testing the cross slope 0.5' inside the existing pavement is the preferred practice to match the existing pavement cross slope. Method I and II will match the existing pavement cross slope, but may contain intermediate breakpoints/vertices if they exist. As with any default cross slopes, the superelevation rate can be overwritten with the proposed Geopak SE input.